

SOLICITATION
UNITED STATES DEPARTMENT OF ENERGY
HELIUM-3 (He-3) SALES SOLICITATION -- 2013

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SECTION A - GENERAL PRE-SALE INFORMATION

The U.S. Department of Energy (Department or DOE) has been participating in an Interagency Group to manage the federal supply of helium-3 (He-3). The Interagency Group assesses and prioritizes requests for He-3 necessary for the federal mission, while simultaneously taking steps to decrease demand and increase supply. The success of the Interagency Group has mitigated short- to mid-term impacts of a He-3 shortage. In recognition of the important activities requiring He-3 that are outside of the federal mission, the Department has identified 4000 liters of purified He-3 gas for competitive sale. Stakeholders whose He-3 needs are met through the formal allocation process for federally sponsored uses should not participate in this auction. The Department wishes to sell the He-3 to multiple Bidders who submit the highest bids in a competitive process. Each Bidder may submit multiple bids, and may designate different bid prices on different lots. Each Bidder may bid on an amount up to the 4,000 liters available, but each Bidder will be limited to an initial award of 400 liters. After each qualifying Bidder is awarded up to the initial 400-liter limit, then remaining gas, if any, will go to satisfy remaining accepted bids over 400 liters starting with the highest bids. He-3 gas remaining unsold at the completion of this process will revert to the Department's inventory.

Unless otherwise specified by the Bidder, He-3 gas will be packaged and delivered in Size 6 or Size 30 compressed gas cylinders, as appropriate. He-3 cylinders will have a Compressed Gas Association (CGA) 580 brass valve. Each cylinder will contain the nominal volume of He-3 gas awarded, purified, and at standard temperature and pressure (STP). Cylinders are designed to U.S. Department of Transportation specification, 3AA 2015, and are refillable cylinders. Please refer to Section B.1.13 for more details on packaging options.

The Department will accept questions regarding the Invitation for Bids. All questions must be submitted via electronic mail to He3auction@science.doe.gov no later than **5 PM (Eastern Daylight Time)(UTC -4), August 23, 2013**. DOE will respond to all questions by **5 PM (Eastern Daylight Time)(UTC -4), August 28, 2013**. DOE will post all questions received and their corresponding answers on the website <http://www.isotopes.gov/he-3auction>. The identity of the stakeholder posing the question will be kept anonymous and will not be posted on the website.

The He-3 Sale Invitation for Bids Provisions (HSP) set forth below will apply to this sale of He-3.

A.1 List of Abbreviations

- a) DOC: U.S. Department of Commerce
- b) DOE: U.S. Department of Energy
- c) HSP: He-3 Sale Invitation for Bids Provisions
- d) UTC: Coordinated Universal Time

A.2 Definitions

- a) *Bid*. The term "bid" means a response to an Invitation for Bids and, if accepted, would bind the Bidder to perform the resultant contract. A bid designates a single lot and price combination for a specific amount of He-3 gas.
- b) *Bidder*. The term "Bidder" means any person or entity that submits a bid to enter into a contract with DOE to purchase He-3.
- c) *Business Day*. The term "business day" means any day except Saturday, Sunday or a U.S. Government holiday.
- d) *DOE Evaluation Committee*. The term "DOE Evaluation Committee" means the persons with the authority to make determinations and findings, and decisions regarding the He-3 bids including award to the highest ranking Bidder on behalf of the Government.
- e) *Government*. The term "Government", unless otherwise indicated in the text, means the United States Government.
- f) *Lot*. A single quantity of He-3 gas, designated by the Bidder on Form CA-90-10, rev 3, which has a single bid price.
- g) *Standard temperature and pressure (STP)*. Standard temperature equals 273 degrees Kelvin (0° Celsius), standard pressure equals 1 atmosphere (atm) (14.7 pounds per square inch (psi)).

SECTION B – He-3 SALES INVITATION FOR BIDS PROVISIONS (HSP)

This HSP sets forth terms and conditions of sale, including Bidder financial and performance responsibility measures, or descriptions thereof, which are applicable to price competitive sales of this He-3.

B.1. General Provisions

1. He-3 is for sale only to stakeholders that do not acquire He-3 through annual federal allocations.
2. Bids shall not be accepted from U.S. Federal Government agencies.
3. Foreign institutions may bid on He-3 gas.
4. Bids shall be submitted in the form of a submittal letter and a completed U.S Department of Energy Isotope and Technical Services Order Form CA-10-90, rev 3. An example is provided as Attachment A.
5. All signed and submitted bid letters and Forms, CA-10-90, rev 3, shall constitute a commitment to purchase, unless the bid is properly withdrawn according to the provisions of this solicitation.
6. All bids shall be in terms of U.S. dollars per liter.
7. The minimum bid price which will be considered is \$2,675 per liter. This does not include the cost of the cylinder, packaging and shipping.
8. The minimum lot size which shall be considered is 25 liters of purified He-3 gas at STP (see attached product specifications in Attachment B). Bids will not be accepted for lots smaller than 25 liters.
9. Bidders may submit multiple bids, each designating a single lot on a separate Form CA-10-90, rev 3. Bidders submitting one or more bids shall be limited to an initial combined award of 400 liters.
10. If a Bidder requests a lot of He-3 up to and including 100 liters, the lot size shall be in multiples of 25 liters. If a Bidder requests a lot larger than 100 liters, the lot size shall be in multiples of 100 liters.
11. Deliveries shall be made to the Bidders, in accordance with their instructions for commercial transportation.
12. Bidders may propose their own delivery schedules and shall pay for deliveries 30 days before desired shipment. Delivery schedules shall not extend beyond May 1, 2014.
13. He-3 gas shall be packaged by DOE in Size 6 or Size 30 compressed-gas cylinders, whichever is appropriate. The cylinders shall become the property of the Buyer. A Size 6 cylinder can package from 25 STP liters to 180 STP liters and the Size 30 cylinder can package from 200 STP liters up to 800 STP liters. Both cylinder sizes shall be fitted with a CGA 580 cylinder valve. The cost of the size 6 cylinder is \$325.00 and the cost of the size 30 cylinder is \$375.00. Different packaging instructions specified by the Bidder may require DOE Technical Services. The cost of the cylinders and any required DOE Technical Services shall be added to the Form CA-10-90, rev 3.
14. Invoices for approved bids and final sales shall include the additional cost of the cylinders plus packaging and handling. Transportation charges will be collected and invoiced by the commercial carrier. Terms of payment are payment in advance by electronic transfer of funds. The Isotope Business Office, National Isotope Development Center, will issue an invoice to the Buyer. The Buyer shall wire funds to:
 - a. TREASURY - NEW YORK CITY ABA 021030004
 - b. Please include "TREAS NYC/(890000001)" on the Receiver Info-Line
 - c. List all invoice numbers being paid on the Sender Info-Line.
15. A Form CA-10-90, rev 3, signed and returned by the Department shall constitute a commitment to provide He-3 gas, subject to the terms of this solicitation and export control requirements.
16. The Bidder shall comply with the United States export laws and the regulations relative to any export or re-export of the He-3. The Bidder shall also agree that the He-3 will not be shipped, transferred or re-exported into any country prohibited by the United States export laws and regulations, or will be used for any purpose prohibited by such laws.
17. Bidders shall unconditionally accept all terms and conditions in the Invitation for Bids.
18. Bidders shall submit the letter described in Provision B.18 below.

B.2 Requirements for a Valid Bid

1. All valid bids to purchase He-3 gas must be received by the U.S. Department of Energy no later than **5 PM (Eastern Daylight Time)(UTC -4), September 17, 2013.**

2. The U.S. Department of Energy requires bids from qualified Bidders be submitted in **electronic format** to **He3auction@science.doe.gov**. A confirmation of receipt will be sent electronically within the next business day. **Do not send bids via U.S. Postal Service mail.**
3. Electronic bids shall constitute a legal, binding bid.
4. Bidders shall provide a submittal letter providing information required in Section B.18 of this HSP.
5. Each bid shall be submitted on a separate Form CA-90-10, rev 3 (Attachment A).
6. Each bid shall identify a single lot of He-3 gas with a minimum bid price of \$2,675 per liter.
7. Each lot shall be at least 25 liters in size, and designated in multiples of 25 liters for lots up to 100 liters in size, or designated in multiples of 100 liters for lots larger than 100 liters.
8. By submission of a bid, the Bidder:
 - a. Certifies that it is customarily engaged in activities utilizing helium.
 - b. Certifies that the He-3 will be used in devices such as dilution refrigerators, cryostats, detection systems, laser spectrometers, etc., or for the manufacture and sale of such devices.
 - c. Agrees without exception to all provisions of Section B and the U.S. Department of Energy Isotope Technical Services Order Form CA-90-10, rev 3 (Attachment A). The Government will not award He-3 to a Bidder who has failed sign Form CA-90-10, rev 3.

Bidders will be notified of any amendments to this Invitation for Bids. Amendments that explicitly require acknowledgment must be so acknowledged by e-mail no later than the end time set for receipt of bids.

B.3 Penalty for False Statements in Bids to Buy Helium-3

1. Making false statements in a bid to buy He-3 may expose a Bidder to a penalty under the False Statements Act, 18 U.S.C. Section 1001, which provides:

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined under this title or imprisoned not more than 5 years, or both.

2. Under 18 U.S.C. 3571, the maximum fine to which an individual or organization may be sentenced for violations of 18 U.S.C. (including Section 1001) is set at \$250,000 and \$500,000 respectively, unless there is a greater amount specified in the statute setting out the offense, or the violation is subject to special factors set out in Section 3571. The United States Sentencing Guidelines also apply to violations of Section 1001, and offenders may be subject to a range of fines under the guidelines up to and including the maximum amounts permitted by law.

B.4 Certification of Independent Price Determination

1. Each submission of a bid shall be considered the Bidder's certification that:
 - a. The price in this bid has been determined independently, without, for the purposes of restricting competition, any consultation, communication, or agreement with any other Bidder or competitor relating to: (i) those prices; (ii) the intention to submit a bid; or (iii) the methods or factors used to calculate the prices bid; and
 - b. The price in this bid has not been and will not be knowingly disclosed by the Bidder, directly or indirectly, to any other Bidder or to any competitor before the time set for receipt of bids, unless otherwise required by law; and
 - c. No attempt has been made or will be made by the Bidder to induce any other concern to submit or not to submit a bid for the purpose of restricting competition; and

- d. The Bidder is the intended user of the He-3, and the He-3 is not for resale, except as incorporated into manufactured devices requiring He-3, such as detection systems, dilution refrigerators, laser spectrometers, etc., for sale to subsequent end-users; or
- e. The Bidder (1) has been authorized in writing to act as agent for the person(s) responsible for such decision in certifying that such persons are compliant with a. through d. of this provision; (2) as their agent does hereby so certify; and (3) as their agent is compliant a. through c. of this provision; and
- f. The Bidder is the person within, or acting as an agent to, the Bidder's organization responsible for determining the price being bid, and is compliant with a. through c. of this provision.

B.5 Purchaser Eligibility

DOE will only sell He-3 to Bidders customarily engaged in activities utilizing helium. By submission of a bid, the Bidder certifies that it meets this requirement.

B.6 Submission of Bids and Modification of Previously Submitted Bids

Bids must be submitted as specified in provisions B.2 and B.7 of this document.

Modification of a previously submitted bid may be accomplished by submission of a revised Form CA-90-10, rev 3 with a new bid price or lot size that will supersede the bid price or lot size previously submitted in its entirety. The Government will only consider for evaluation the Bidder's last price received electronically prior to the receipt deadline.

B.7 Late Bids and Withdrawal of Bids

Bids not received by the time and date set for receipt of bids will not be considered for evaluation. The date/time stamp affixed by the receiving electronic mail system will be the sole determinant of timely receipt.

A Bidder may withdraw a bid by submitting a modified Form CA-90-10, rev 3, setting the lot size to zero prior to the end time set for receipt of bids.

B.8 Currency for Bids

Bid prices will be stated and paid in U.S. dollars.

B.9 Language of Bids and Contracts

All bids in response to the Invitation for Bids and all modifications of bids shall be in English. All correspondence between Bidders or purchasers and DOE shall be in English.

B.10 Proprietary Data

Bid quantities and prices may be considered proprietary information. If any other information submitted in connection with a sale is considered proprietary, that information should be so marked, and an explanation provided as to the reason such data should be considered proprietary. Any final decision as to whether the material so marked is proprietary will be made by DOE. Freedom of Information Act regulations governing the release of proprietary data will apply.

B.11 Mistake in Bid

1. The DOE Evaluation Committee will examine all bids for mistakes. In cases where the DOE Evaluation Committee has reason to believe a mistake may have been made, the committee will request from the Bidder a verification of or correction to the bid, calling attention to the suspected mistake. The DOE

Evaluation Committee or a representative may telephone the Bidder and confirm the request by e-mail. The DOE Evaluation Committee may set a limit of as little as one business day for telephone or e-mail response. If no response is received, the DOE Evaluation Committee may determine that no error exists and proceed with bid evaluation.

The DOE Evaluation Committee will make administrative determinations described below if a Bidder alleges a mistake on its bid after the bid submission deadline and before award.

2. The DOE Evaluation Committee may refuse to permit the Bidder to withdraw a bid after the bid submission deadline, but permit correction of the bid if clear and convincing evidence establishes both the existence of a mistake and the bid actually intended. However, if such correction would result in displacing one or more acceptable bids which are higher than the corrected bid, the DOE Evaluation Committee will not so determine unless the existence of the mistake can be attributed to the Invitation for Bids itself.
3. The DOE Evaluation Committee may determine that a Bidder will be permitted to withdraw a bid in whole or in part if only part of the bid is affected, when the Bidder requests permission to do so and clear and convincing evidence establishes the existence of a mistake, but not the bid actually intended.

In all cases in which the Bidder is allowed to make verbal corrections to the original bid, confirmation of these corrections must be received in writing within the time set by the DOE Evaluation Committee or the original bid will stand as submitted.

B.12 Overall Evaluation of Bids

DOE will evaluate the bids for responsiveness and completeness. Non-responsive bids shall be rejected.

Bidders submitting incomplete bids will be notified by DOE. DOE will request Bidders to submit missing information within three calendar days. DOE reserves the right to reject any or all bids that do not comply with the provisions of this Invitation for Bids and to waive minor informalities or irregularities in bids received.

The DOE Evaluation Committee will reject bids when:

1. A Bidder is on the Federal Government's list of debarred, ineligible and suspended Bidders; or
2. Evidence, with respect to a Bidder, comes to the attention of the DOE Evaluation Committee, of conduct or activity that represents a violation of law or regulation (including an Executive Order); or
3. Evidence is brought to the attention of the DOE Evaluation Committee of past activity or conduct of a Bidder that shows a lack of integrity (including actions inimical to the welfare of the United States) or unwillingness to perform, so as to substantially diminish the DOE Bid Evaluation Committee's confidence in the Bidder's performance under the proposed contract; or
4. A Bidder obtains He-3 through the current federal He-3 allocation process.
5. The Bidder has not submitted the mandatory documentation described in Section B.18.
6. The Bidder designates more than one lot on Form CA-90-10, rev 3.

B.13 Other Evaluation Factors Considered for Award

Should the number of bids exceed available gas and be similar in price, the DOE reserves the right to make an assessment on the merit of the proposed use of the gas, in order to make a final decision on award.

B.14 Selection and Award

1. The DOE Evaluation Committee will evaluate and rank each of the bids based on highest to lowest bid prices. Merit will also be considered if necessary.
2. Each Bidder is initially limited to a lot or multiple lots up to 400 liters.
3. Each Bidder may submit multiple bids amounting to the total amount of He-3 gas available.
4. Selection and award of lots will be made in order of the Bidders who submit the highest priced bids to the lowest price bids, responsive to the applicable laws and this Solicitation for Bids.
5. If He-3 remains after all accepted Bids have been awarded up to the initial 400 liters, then remaining He-3 gas will be awarded to satisfy bids exceeding the initial 400-liter limit per Bidder, if any, in the order of highest bids to lowest bids. In the event that there is a draw, the remaining liters will be divided among those customers with the same bid.
6. The DOE Evaluation Committee may reduce the quantity available and / or reject a bid if it is determined to be the best interest of the Government.

B.15 Requests for Additional Information

DOE reserves the right to require the submission of additional information from the Bidder, including financial statements, plans for use of He-3 and any other information relevant to the performance of the contract. The DOE Evaluation Committee will set a deadline for receipt of this information, if needed.

B.16 Bidder's Certification of Acceptance Period

1. By submission of a bid, the Bidder certifies that its bid will remain valid for 30 business days after the date set for the receipt of bids.
2. By mutual agreement of DOE and the Bidder, the Bidder's acceptance period may be extended for a longer period.

B.17 Notification of Award

DOE shall notify the awardee(s) via e-mail followed by an official award letter on Department letterhead.

B.18 Mandatory Document Submission

1. Each bid, designating one lot and one bid price, shall be listed on its own Form CA-90-10, rev 3.
2. Pursuant to 41CFR 109-1.5303(b)(6) and 109-45.301-51 regarding sales contracts for DOE high-risk property (which includes Dual Use List commodities), Bidders shall provide with their bid submittals a letter, which contains the following information.
 - a. The nature of its business and business location.
 - b. The Bidder's intended use for He-3, and potential end-users and end-use locations, and acknowledgement that the He-3 is not for resale except as part of devices requiring He-3 such as detection systems, dilution refrigerators, laser spectrometers, etc.
 - c. The benefit of its intended use to the United States.
 - d. Its intentions to export He-3.
 - e. Acknowledgement that He-3 is export controlled, it will comply with all U.S. export regulations, obtain a U.S. Department of Commerce (DOC) export license, if necessary, and it will pass DOE export control guidance to subsequent buyers.
 - f. Acknowledgement that Tritium and He-3 separation technology is controlled and may require a DOC export license before the technology is transferred to a foreign national or a U.S. representative of a

foreign entity. No separations technology can be transferred to a foreign national from a designated DOE Sensitive Country without first obtaining a DOC export license.

- g. The letter shall be signed by a company officer and a digital copy of the letter be submitted to He3auction@science.doe.gov. A confirmation of receipt will be sent electronically within the next business day. Mandatory documentation shall be received by the U.S. Department of Energy no later than 5 PM (**Eastern Daylight Time**)(UTC -4), **September 17, 2013**.

B.19 Purchase of He-3

1. If needed, DOE will update the Isotope and Technical Service Order Form(s) CA-10-90, rev. 3, received from the Bidders, to complete the form with: (1) agreed-upon corrections to bid quantity and price, (2) itemize costs of required containers, and (3) itemize costs of requested technical services. DOE will determine total price, sign the form, and fax copies to the successful buyer(s). The Bidder(s) will sign the CA-10-90, rev. 3 form and return it to the United States Department of Energy, Oak Ridge Isotope Business Office within 7 calendar days of the date on the CA-10-90 form.
2. The United States Department of Energy, Oak Ridge Isotope Business Office in the National Isotope Development Center shall invoice the Buyer(s) within 7 calendar days after receipt of the signed CA-10-90, rev. 3 form.
3. Bidders shall electronically transfer the payment funds to the account listed in Section B.1.(14), He-3 Sales Invitation for Bids Provisions, within 14 calendar days, or the He-3 may be awarded to the next highest Bidder.
4. The United States Department of Energy's Oak Ridge Isotope Business Office will authorize shipment of the He-3 gas from Oak Ridge National Laboratory.

B.20 Delivery of Purchased He-3

1. The Bidder shall be responsible for packaging, handling and shipping costs.
2. Deliveries shall be made to the Bidders in accordance with their instructions for commercial transportation.
3. Bidders may propose their own delivery schedules and shall pay for deliveries 30 days before desired shipment. Delivery schedules shall not extend beyond May 1, 2014.
4. Final sales shall include the cost of the cylinders. The cylinders shall become the property of the Bidder.
5. Each Bidder should provide the United States Department of Energy's Oak Ridge Isotope Business Office with their preferred carrier for shipment of He-3 and their account number for the freight charges.

Attachment A
U.S Department of Energy
Isotope and Technical Services
Order Form CA 10-90, rev 3.10

Attachment B
Helium-3 Specifications

Chemical Purity > 99.9995% (total impurities as specified below < 5 p.p.m.)

Isotopic Enrichment > 99.9%

Description Specifications (mole/mole)

Helium-3, atomic fraction (%) > 99.9%

Oxygen (ppm) < 1

Nitrogen (ppm) < 1

Carbon Monoxide (ppm) < 1

Carbon Dioxide (ppm) < 0.5

Argon (ppm) < 0.5

Water (ppm) < 0.1

Activity (uCi/cc) < 1.3×10^{-7}